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SEQUENCE LISTING

<110> MADDON, Paul J.
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MA, Dangshe

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Pro	Gly	Arg	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Ala	Phe	35	40	45	
Ser	Arg	Tyr	Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	50	55	60	
Glu	Trp	Val	Ala	Val	Ile	Trp	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	65	70	75	80
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	85	90	95	
Thr	Gln	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	100	105	110	
Tyr	Tyr	Cys	Ala	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Tyr	Tyr	Tyr	Tyr	Gly	115	120	125	
Met	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr	Val	Thr	Val	Ser	Ser			130	135	140	

<210> 16

<211> 463

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglIII cloning junction, signal peptide, V region, portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 16

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ggatctcacc atgaggggtcc ctgctcagct cctgggactc ctgctgctct ggctcccaga      60
taccagatgt gacatccaga tgaccagtc tccatcctcc ctgtctgcat ctgtaggaga      120
cagagtcacc atcacttgcc gggcgagtc gggcattagc aattatttag cctgggtatca      180
gcagaaaaca gggaaagttc ctaagttcct gatctatgaa gcatccactt tgcaatcagg      240
gggtcccatct cggttcagtg gcggtggatc tgggacagat ttcaactctca ccatcagcag      300
cctgcagcct gaagatgttg caacttatta ctgtcaaaat tataacagtg ccccatcac      360
tttcggccct gggaccaaag tggatatcaa acgaactgtg gctgcaccct ctgtcttcat      420
cttcccgcca tctgatgagc agttgaaatc tggaactgct agc                        463

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<210> 17

<211> 127

<212> PRT

<213> Homo sapiens

<400> 17

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Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Trp Leu Pro
1          5          10          15
Asp Thr Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
20          25          30
Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly
35          40          45
Ile Ser Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Thr Gly Lys Val Pro
50          55          60
Lys Phe Leu Ile Tyr Glu Ala Ser Thr Leu Gln Ser Gly Val Pro Ser
65          70          75          80
Arg Phe Ser Gly Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
85          90          95
Ser Leu Gln Pro Glu Asp Val Ala Thr Tyr Tyr Cys Gln Asn Tyr Asn
100          105          110

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Ser Ala Pro Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys
115 120 125

<210> 18

<211> 508

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglII cloning junction, signal peptide, V region, portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 18
ggatctcacc atgggggtcaa ccgccatcct caccatggag ttggggctgc gctggggttct 60
cctcgttgct cttttaagag gtgtccagtg tcaggtgcag ctggtggagt ctgggggagg 120
cgtgggtccag cctgggaggt ccctgagact ctctgtgca gcgtctggat tcaccttcag 180
taactatgtc atgcactggg tccgccaggc tccaggcaag gggctggagt ggggtggcaat 240
tatatggtat gatggaagta ataaatacta tgcagactcc gtgaagggcc gattcaccat 300
ctccagagac aattccaaga acacgctgta tctgcaaatg aacagcctga gagccgagga 360
cacggctgtg tattactgtg cgggtggata taactggaac tacgagtacc actactacgg 420
tatggacgtc tggggccaag ggaccacggt caccgtctcc tcagcctcca ccaagggccc 480
atcggtcttc cccctggcac cctctagc 508

<210> 19

<211> 143

<212> PRT

<213> Homo sapiens

<400> 19

Met Glu Leu Gly Leu Arg Trp Val Leu Leu Val Ala Leu Leu Arg Gly
1 5 10 15
Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln
20 25 30
Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45
Ser Asn Tyr Val Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50 55 60
Glu Trp Val Ala Ile Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala

65		70		75		80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn	85		90		95	
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val	100		105		110	
Tyr Tyr Cys Ala Gly Gly Tyr Asn Trp Asn Tyr Glu Tyr His Tyr Tyr	115		120		125	
Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser	130		135		140	

<210> 20

<211> 463

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglII cloning junction, signal peptide, V region, portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 20

ggatctcacc atgaggggtcc ccgctcagct cctgggggtc ctgctgctct gtttcccagg	60
tgccagatgt gacatccaga tgaccagtc tccatcctca ctgtctgcat ctgtaggaga	120
cagagtcacc atcacttgct gggcgagtca gggcattacc aattatttag cctgggtttca	180
gcagaaacca gggaaagccc ctaagtccct tatctatgct gcatccagtt tgcaaagtgg	240
gggtcccatca aagttcagcg gcagtggatc tgggacagat ttcagtctca ccatcagcag	300
cctgcagcct gaagattttg caacttatta ctgccaacag tataatagtt acccgatcac	360
cttcggccaa gggacacgac tggagattaa acgaactgtg gctgcacat ctgtcttcat	420
cttcccgcca tctgatgagc agttgaaatc tggaactgct agc	463

<210> 21

<211> 127

<212> PRT

<213> Homo sapiens

<400> 21

Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Cys Phe Pro	1	5	10	15
Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser	20	25	30	

Ala	Ser	Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Gln	Gly
		35					40					45			
Ile	Thr	Asn	Tyr	Leu	Ala	Trp	Phe	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro
		50				55					60				
Lys	Ser	Leu	Ile	Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser
65					70					75					80
Lys	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Ser	Leu	Thr	Ile	Ser
				85					90					95	
Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Tyr	Asn
			100					105					110		
Ser	Tyr	Pro	Ile	Thr	Phe	Gly	Gln	Gly	Thr	Arg	Leu	Glu	Ile	Lys	
		115					120					125			

<210> 22

<211> 490

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglII cloning junction, signal peptide, V region, portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 22	
ggatctcacc atggagttgg gacttagctg ggttttcctc gttgctcttt taagaggtgt	60
ccagtgtcag gtccagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct	120
gagactctcc tgtgcagcgt ctggattcac cttcagtagc tatggcatgc actgggtccg	180
ccaggctcca ggcaaggggc tggactgggt ggcaattatt tggcatgatg gaagtaataa	240
atactatgca gactccgtga agggccgatt caccatctcc agagacaatt ccaagaagac	300
gctgtacctg caaatgaaca gtttgagagc cgaggacacg gctgtgtatt actgtgcgag	360
agcttggggc tatgactacg gtgactatga atactacttc ggtatggacg tctggggcca	420
agggaccacg gtcaccgtct cctcagcctc caccaagggc ccatcgggtct tccccctggc	480
accctctagc	490

<210> 23

<211> 145

<212> PRT

<213> Homo sapiens

<400> 23

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Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Leu Leu Arg Gly
1      5      10      15
Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln
20      25      30
Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35      40      45
Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
50      55      60
Asp Trp Val Ala Ile Ile Trp His Asp Gly Ser Asn Lys Tyr Tyr Ala
65      70      75      80
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Lys
85      90      95
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
100     105     110
Tyr Tyr Cys Ala Arg Ala Trp Ala Tyr Asp Tyr Gly Asp Tyr Glu Tyr
115     120     125
Tyr Phe Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser
130     135     140

Ser
145

```

<210> 24

<211> 463

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglII cloning junction, signal peptide, V region, portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 24

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ggatctcacc atgagggtcc ctgtcagct cctggggctc ctgctgctct gtttcccagg      60
tgccagatgt gacatccaga tgaccagtc tccatcctca ctgtctgcat ctgtaggaga      120
cagagtcacc atcacttgct gggcgagtca gggcattagc cattatttag cctgggtttca      180
gcagaaacca gggaaagccc ctaagtcctt gatctatgct gcatccagtt tgcaaagtgg      240
gggtcccatca aagttcagcg gcagtggatc tgggacagat ttcactctca ccatcagcag      300
cctacagcct gaagattttg caacttatta ctgccaacag tataatagtt tcccgtcac      360

```

tttcggcgga gggaccaagg tggagatcaa' acgaactgtg gctgcaccat ctgtcttcat 420
cttccccgcca tctgatgagc agttgaaatc tggaactgct agc 463

<210> 25

<211> 127

<212> PRT

<213> Homo sapiens

<400> 25

Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Leu Leu Cys Phe Pro
1 5 10 15
Gly Ala Arg Cys Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser
20 25 30
Ala Ser Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly
35 40 45
Ile Ser His Tyr Leu Ala Trp Phe Gln Gln Lys Pro Gly Lys Ala Pro
50 55 60
Lys Ser Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser
65 70 75 80
Lys Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser
85 90 95
Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn
100 105 110
Ser Phe Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys
115 120 125

<210> 26

<211> 469

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglII cloning junction, signal peptide, V region,
portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning
junction

<400> 26

ggatcccacc atgggggtcaa ccgtcatcct cgccctcttc ctggctgttc tccaaggagt 60
ctgtgccgag gtgcagctgg tgcagtctgg agcagaggtg aaaaagcccg gggagtctct 120
gaagatctcc tgtaaggggt ctggatacag ctttaccagt tactggatcg gctgggtgcg 180

ccagatgccc gggaaaggcc tggagtggat ggggatcacc taccctgggtg actctgatac 240
cagatacagc ccgtccttcc aaggccaggt caccatctca gccgacaagt ccatcagcac 300
cgcctacctg cagtggagca gcctgaaggc ctccgacacc gccatgtatt actgtgcgag 360
acggatggca gcagctggcc cctttgacta ctggggccag ggaaccctgg tcaccgtctc 420
ctcagcctcc accaagggcc catcgggtctt cccctgggca ccctctagc 469

<210> 27

<211> 138

<212> PRT

<213> Homo sapiens

<400> 27

Met	Gly	Ser	Thr	Val	Ile	Leu	Ala	Leu	Leu	Leu	Ala	Val	Leu	Gln	Gly	1	5	10	15
Val	Cys	Ala	Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	20	25	30	
Pro	Gly	Glu	Ser	Leu	Lys	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Ser	Phe	35	40	45	
Thr	Ser	Tyr	Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	50	55	60	
Glu	Trp	Met	Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	65	70	75	80
Pro	Ser	Phe	Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	85	90	95	
Thr	Ala	Tyr	Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	100	105	110	
Tyr	Tyr	Cys	Ala	Arg	Arg	Met	Ala	Ala	Ala	Gly	Pro	Phe	Asp	Tyr	Trp	115	120	125	
Gly	Gln	Gly	Thr	Leu	Val	Thr	Val	Ser	Ser							130	135		

<210> 28

<211> 466

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglIII cloning junction, signal peptide, V region, portion of C region and 3' XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 28
 ggatctcacc atgaggggtcc ccgctcagct tctcttcctt ctgctactct ggctcccaga 60
 taccactgga ggaatagtga tgacgcagtc tccagccacc ctgtctgtgt ctccagggga 120
 aagagccacc ctctcctgca ggaccagtca gagtattggc tggaacttag cctggtacca 180
 acagaaacct ggccaggctc ccaggctcct catctatggg gcatcttcca ggaccactgg 240
 tatcccagcc aggttcagtg gcagtgggtc tgggacagag ttcactctca ccatcagcag 300
 cctgcagctct gaagattctg cagtttatta ctgtcagcat tatgataact ggcccatgtg 360
 cagttttggc caggggaccg agctggagat caaacgaact gtggctgcac catctgtctt 420
 catcttcccg ccatctgatg agcagttgaa atctggaact gctagc 466

<210> 29

<211> 128

<212> PRT

<213> Homo sapiens

<400> 29

Met	Arg	Val	Pro	Ala	Gln	Leu	Leu	Phe	Leu	Leu	Leu	Leu	Trp	Leu	Pro	1	5	10	15
Asp	Thr	Thr	Gly	Gly	Ile	Val	Met	Thr	Gln	Ser	Pro	Ala	Thr	Leu	Ser	20	25	30	
Val	Ser	Pro	Gly	Glu	Arg	Ala	Thr	Leu	Ser	Cys	Arg	Thr	Ser	Gln	Ser	35	40	45	
Ile	Gly	Trp	Asn	Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Ala	Pro	50	55	60	
Arg	Leu	Leu	Ile	Tyr	Gly	Ala	Ser	Ser	Arg	Thr	Thr	Gly	Ile	Pro	Ala	65	70	75	80
Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Glu	Phe	Thr	Leu	Thr	Ile	Ser	85	90	95	
Ser	Leu	Gln	Ser	Glu	Asp	Ser	Ala	Val	Tyr	Tyr	Cys	Gln	His	Tyr	Asp	100	105	110	
Asn	Trp	Pro	Met	Cys	Ser	Phe	Gly	Gln	Gly	Thr	Glu	Leu	Glu	Ile	Lys	115	120	125	

<210> 30

<211> 487

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglII cloning junction, signal peptide, V region, portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 30
ggatctcacc atggagtttg ggctgtgctg gattttcctc gttgctcttt taagaggtgt 60
ccagtgtcag gtgcagctgg tggagtctgg gggaggcgtg gtccagcctg ggaggtccct 120
gagactctcc tgtgcagcct ctggattcac cttcattagc tatggcatgc actgggtccg 180
ccaggctcca ggcaaggggc tggagtgggt ggcagttata tcatatgatg gaagtaataa 240
atactatgca gactccgtga agggccgatt caccatctcc agagacaatt ccaagaacac 300
gctgtatctg caaatgaaca gcctgagagc tgaggacacg gctgtgtatt actgtgcgag 360
agtattagtg ggagctttat attattataa ctactacggg atggacgtct ggggcccaagg 420
gaccacggtc accgtctcct cagcctccac caagggccca tcggtcttcc ccctggcacc 480
ctctagc 487

<210> 31

<211> 144

<212> PRT

<213> Homo sapiens

<400> 31

Met	Glu	Phe	Gly	Leu	Cys	Trp	Ile	Phe	Leu	Val	Ala	Leu	Leu	Arg	Gly	1	5	10	15
Val	Gln	Cys	Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	20	25	30	
Pro	Gly	Arg	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	35	40	45	
Ile	Ser	Tyr	Gly	Met	His	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu	50	55	60	
Glu	Trp	Val	Ala	Val	Ile	Ser	Tyr	Asp	Gly	Ser	Asn	Lys	Tyr	Tyr	Ala	65	70	75	80
Asp	Ser	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	85	90	95	
Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	100	105	110	

Tyr Tyr Cys Ala Arg Val Leu Val Gly Ala Leu Tyr Tyr Tyr Asn Tyr
115 120 125

Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser
130 135 140

<210> 32

<211> 478

<212> DNA

<213> Artificial Sequence

<220>

<223> Includes BamHI/BglIII cloning junction, signal peptide, V region, portion of C region and 3'XbaI/NheI (heavy) or NheI (light) cloning junction

<400> 32
ggatctcacc atgaggggtcc ctgctcagct cctggggctg ctaatgctct ggatacctgg 60
atccagtgc gatattgtga tgaccagac tccactctct ctgtccgtca cccctggaca 120
gccggcctcc atctcctgca agtctagtca gagcctcctg catagtgatg gaaagacctt 180
tttgtattgg tatctgcaga agccaggcca gcctccacag ctctgatct atgaggtttc 240
caaccggttc tctggagtgc cagatagggt cagtggcagc gggtcaggga cagatttcac 300
actgaaaatc agccgggtgg aggctgagga tgttgggctt tattactgca tgcaaagtat 360
acagcttccg ctcactttcg gcggaggag caaggtggag atcaaacgaa ctgtggctgc 420
accatctgtc ttcactttcc cgccatctga tgagcagttg aaatctggaa ctgctagc 478

<210> 33

<211> 132

<212> PRT

<213> Homo sapiens

<400> 33

Met Arg Val Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Ile Pro
1 5 10 15

Gly Ser Ser Ala Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Ser
20 25 30

Val Thr Pro Gly Gln Pro Ala Ser Ile Ser Cys Lys Ser Ser Gln Ser
35 40 45

Leu Leu His Ser Asp Gly Lys Thr Phe Leu Tyr Trp Tyr Leu Gln Lys
50 55 60

[illegible]